

DETERMINATION OF NON-SIGNIFICANCE

PROPOSAL NAME:	Phantom Lake Forest Restoration
LOCATION:	15604 SE 16 th Street
FILE NUMBERS:	20-123105-LO
PROPONENT:	Rick Bailey, City of Bellevue Parks

DESCRIPTION OF PROPOSAL:

Vegetation management within a 2-acre forested area of the Phantom Lake Park property adjacent to Phantom Lake that is part of the larger Lake Hills Greenbelt. Proposal includes removal of invasive vegetation and replanting with native vegetation to restore the project area that is located within the 110-foot buffer from the Phantom Lake wetland. This work is also within a Type-F stream and associated wetland within the 110-foot buffer from the Phantom Lake wetland.

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision.

DATE ISSUED: 2/11/2021

APPEAL DATE: 2/25/2021

A written appeal must be filed in the City Clerk's Office by 5 p.m. on the appeal date noted above.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project) or if the DNS was procured by misrepresentation or lack of material disclosure.

Issued By: Heidi Bedwell, Planning Manager for Date: February 11, 2021_

Elizabeth Stead, Environmental Coordinator Development Services Department Proposal Name: Phantom Lake Forest Restoration

Proposal Address: 15604 SE 16th Street

Proposal Description: City of Bellevue Parks proposal to conduct vegetation

management within a 2-acre forested area of the Phantom Lake Park property adjacent to Phantom Lake that is part of the larger Lake Hills Greenbelt. Proposal includes removal of invasive vegetation and replanting with native vegetation to restore the project area that is located within the 110-foot buffer from the Phantom Lake wetland. This work is also within a Type-F stream and associated wetland within the 110-foot buffer from

the Phantom Lake wetland.

File Number: 20-123105-LO

Applicant: Rick Bailey, City of Bellevue Parks

Decisions IncludedCritical Areas Land Use Permit - (Process II. 20.30P)

Planner: Reilly Pittman, Land Use Planner

State Environmental Policy Act

Threshold Determination: Determination of Non-Significance

By: Heidi Bedwell, Planning Manager for

Elizabeth Stead, Environmental Coordinator

Development Services Department

Director's Decision: Approval with Conditions

By: Heidi Bedwell, Planning Manager for

Michael A. Brennan, Director

Development Services Department

Application Date:December 11, 2020Notice of Application Date:January 14, 2021Decision Publication Date:February 11, 2021Project Appeal Deadline:February 25, 2021

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Appeal of the SEPA Threshold Determination or Critical Areas Land Use Permit decision must be made to the City of Bellevue City Clerk's Office by 5 p.m. on the date noted above as the appeal deadline.

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Documents Referenced in File

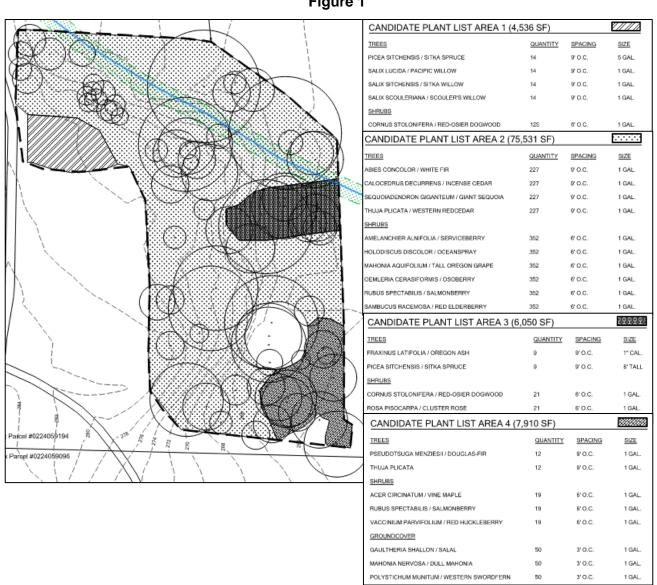
- 1. Project Plans Attached
- 2. Critical Areas Narrative
- 3. SEPA Checklist

All other documents and materials found in project file

I. **Proposal Description**

City of Bellevue Parks is proposing to remove invasive vegetation and replace it with native vegetation within a 2-acre area of Phantom Lake Park adjacent to Phantom Lake within the Lake Hills Greenbelt. The proposed vegetation management is located within the 110-foot buffer from the Phantom Lake wetland. A stream and associated wetland have also been located in vicinity of the work area and this work is within these critical areas and their buffers as well. Vegetation Management is an allowed use in critical areas and buffers per Land Use Code 20.25H.055 and requires approval of a Critical Areas Land Use Permit is subject to certain performance standards discussed in this report. See Figure 1 below for project plan.

Figure 1



II. Consistency with Land Use Code Requirements

A. Consistency with LUC 20.25H.055.C.3.v.i - Vegetation Management Plan Performance Standards

Is the Vegetation Management Plan prepared by a qualified professional? Finding: The plan was prepared by the Watershed Company which is a qualified biologist.

2. Does the Vegetation Management Plan include the following?

a. A description of existing site conditions, including existing critical area functions and values:

Finding: The site is adjacent to Phantom Lake and is currently overrun with invasive species and lacks a diverse tree canopy and understory which compose a healthy forest. Existing tree species include red alder, bigleaf maple, western red cedar, Oregon ash, black cottonwood, and Sitka spruce. Understory vegetation includes redtwig dogwood, devil's club, and significant invasive species coverage of reed canarygrass, blackberry, ivy, and holly. This area is located within overlapping critical areas and buffers that include the 110-foot buffer from the Phantom Lake wetland as well as a stream and wetland within this buffer. The 100-year floodplain of Phantom Lake is located just east of the proposed work area and no work is proposed in the floodplain.

b. A site history;

Finding: The site appears to have been forested since 1936 but surrounding areas have been used for agriculture in the past. The areas surrounding the park are now generally developed with residential uses.

c. A discussion of the plan objectives;

Finding: The objectives are to install native vegetation in place of the removed invasive vegetation.

d. A description of all sensitive features;

Finding: The impacted area is the wetland buffer from the Phantom Lake wetland, stream and stream buffer and the wetland adjacent to the stream which cross the project area. This stream is considered a Type-F stream until a more detailed stream study is provided.

e. Identification of soils, existing vegetation, and habitat associated with species of local importance present on the site;

Finding: No species of local importance have been identified but this area does have potential to provided habitat to species. The proposed native vegetation will improve habitat quality above the invasive vegetation that currently exists.

f. Allowed work windows;

Finding: The project will comply with any work windows required by state or federal permit review as well as limits on work required by the City's clearing and grading code.

g. A clear delineation of the area within which clearing and other vegetation management practices are allowed under the plan; and

Finding: See plan attached which shows the work area.

h. Short- and long-term management prescriptions, including characterization of trees and vegetation to be removed, and restoration and revegetation plans with native species, including native species with a lower growth habit. Such restoration and revegetation plans shall demonstrate that the proposed Vegetation Management Plan will not significantly diminish the functions and values of the critical area or alter the forest and habitat characteristics of the site over time.

Finding: See attached plan for maintenance and monitoring proposed. The City's Parks department will assume future continual maintenance and monitoring of this area.

3. Would any proposed tree removal result in a significant impact to habitat associated with species of local importance?

Finding: No tree removal is proposed.

4. Is the area under application subject to any applicable neighborhood restrictive covenants that address view preservation or vegetation management? The existence of and provisions of neighborhood restrictive covenants shall not be entitled to any more or less weight than other reports and materials in the record. Finding: No covenants exists.

B. Consistency with LUC 20.25H.080 and LUC 20.25H.100 – Performance Standards for Streams and Wetlands

The submitted project narrative which is reference document 2 of this report demonstrates the proposal is consistent with these performance standards for projects in stream, wetlands, or their buffers. The project does not propose any lights, increased noise, increased runoff or impervious areas, or treated water and proposes to plant the area with dense native vegetation that will be maintained per the Parks Department BMPs for use of chemicals and noxious species controls.

III. Public Notice and Comment

Application Date: December 11, 2020
Public Notice (500 feet): January 14, 2021
Minimum Comment Period: January 28, 2021

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The Notice of Application for this project was published in the City of Bellevue Weekly Permit Bulletin and Seattle Times on January 14, 2021. It was mailed to property owners within 500 feet of the project site. One comment was received that noted a discrepancy in the tree inventory between the project plans and the critical areas narrative. No trees are proposed for removal as part of this work and the plans show all trees that exist on the site which will be maintained under the future clearing and grading permit.

IV. Summary of Technical Reviews

A. Clearing and Grading

The Clearing and Grading Division of the Development Services Department reviewed the proposal for compliance with Clearing and Grading codes and standards and has approved the application.

B. Utilities

The Utilities Review section of Development Services Department reviewed the proposal for compliance with Utility codes and standards and has approved the application.

V. State Environmental Policy Act (SEPA)

Environmental review is required for the proposal under the State Environmental Policy Act (SEPA), Chapter 43.21C RCW and Washington Administrative Code (WAC) 197-11, and the City's Environmental Procedures Code, Chapter 22.02 of the Bellevue City Code (BCC). The Environmental Checklist together with information provided below (and in the official file) adequately discloses expected environmental impacts associated with the proposed Design Review approval. The environmental review indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. Therefore, issuance of a Determination of Non-Significance (DNS) is the appropriate threshold determination under SEPA.

Adverse impacts which are less than significant are subject to City Codes or Standards, which are intended to mitigate those impacts. In cases where the City has adopted development regulations to systematically avoid or mitigate adverse impacts, those standards and regulations, where applicable, will normally constitute adequate mitigation of the impacts. Where such impacts and regulatory items correspond, further documentation is not necessary. Where impacts and regulations do not correspond, or where unanticipated impacts are not mitigated by existing regulations, BCC 22.02.140 provides substantive authority to mitigate impacts disclosed through the environmental review process.

A discussion of the impacts associated with the project is noted below, together with any specific conditions of approval. These impacts will be mitigated to less than significant through exercise of Code authority as well as through project-specific Conditions of Approval contained in this report.

A. Earth and Water

The only impacts are temporary and result from removal of invasive vegetation that will be replaced with native plants.

B. Plants and Animals

As discussed, the area will be replanted with native vegetation to establish a forested condition. See submitted planting plans which are attached to this report.

VI. Decision Criteria

A. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria

The Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

1. The proposal obtains all other permits required by the Land Use Code.

<u>Finding:</u> All required construction permits will be obtained. <u>See Conditions of Approval in Section IX of this report.</u>

2. The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer.

<u>Finding:</u> The proposal is not resulting in development and is restoring critical area and buffer functions which are the best possible outcome and do not result in new permanent impacts.

3. The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable.

<u>Finding:</u> The proposal incorporates the performance standards discussed in Section II above.

4. The proposal will be served by adequate public facilities including street, fire protection, and utilities.

Finding: The proposal does not impact public services and enhances City park lands.

5. The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210.

<u>Finding:</u> The proposal includes a planting plan consistent with the requirements of LUC 20.25H.210.

6. The proposal complies with other applicable requirements of this code.

Finding: As discussed in this report, the proposal complies with all other applicable

requirements of the Land Use Code.

VII. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, SEPA, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the proposed vegetation management in a 2-acre area of Phantom Lake Park.

Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. Separate construction permits are required, and all plans are subject to review for compliance with applicable City of Bellevue codes and standards.

<u>Note- Expiration of Approval:</u> In accordance with LUC 20.30P.150 a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a construction permit or other necessary development permits within one year of the effective date of the approval.

VIII. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Janney Gwo, 425-452-6190
Utilities Code – BCC Title 24	Jason Felgar, 425-452-7851
Land Use Code- BCC Title 20	Reilly Pittman, 425-452-4350

The following conditions are imposed under the Bellevue City Code as referenced:

1. Clearing and Grading Permit Required: Approval of this Critical Areas Land Use Permit does not constitute an approval of any construction permit. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval.

Authority: Land Use Code 20.30P.140; Clearing & Grading Code 23.76.035

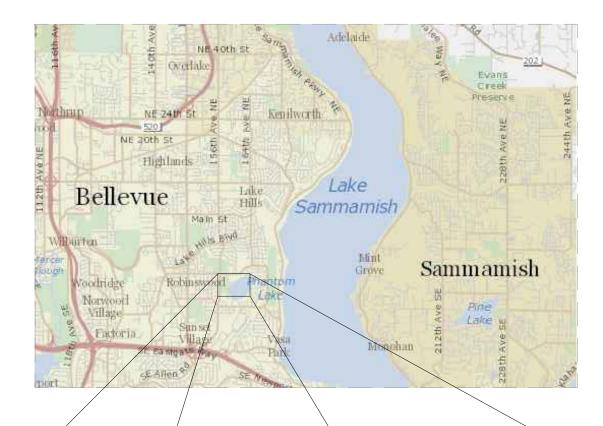
Reviewer: Reilly Pittman, Development Services Department

2. Land Use Inspection: Inspection of restoration planting is required as part of the clearing and grading inspection process.

Authority: Land Use Code 20.25H.210

Reviewer: Reilly Pittman, Development Services Department





LEGEND

APPROXIMATE WETLAND BOUNDARY

APPROXIMATE STREAM CENTERLINE

EXISTING TREES

EXISTING PATHWAY

CONTOUR LINES

PARCEL BOUNDARY

PROJECT LIMITS

VEGETATION COMMUNITY #1 -MONOCULTURE OF PHALARIS ARUNDINACEA (REED

CANARYGRASS). APPEARS TO HAVE HYDROLOGY; POTENTIAL WETLAND. VEGETATION COMMUNITY #2

-NEAR-MONOCULTURE UNDERSTORY OF RUBUS ARMENIACUS (HIMALAYAN BLACKBERRY). HEDERA HELIX (ENGLISH IVY) GROWING UP SOME

VEGETATION COMMUNITY #3 - REDUCED R. ARMENIACUS. DOMINATED BY SALIX SPP. (WILLOW) AND CORNUS STOLONIFERA (REDTWIG DOGWOOD). WATERCOURSE OBSERVED IN THIS AREA; POTENTIAL WETLAND.

VEGETATION COMMUNITY #4 - ACER MACROPHYLLUM (BIGLEAF MAPLE) WITH OPLOPANAX HORRIDUS (DEVIL'S CLUB) UNDERSTORY.

VEGETATION COMMUNITY #5 -THUJA PLICATA (WESTERN REDCEDAR), POLYSTICHUM MINITUM (WESTERN SWORDFERN) RUBUS SPECTABILIS (SALMONBERRY) WITH SOME ILEX AQUIFOLIUM (ENGLISH HOLY) AND R. ARMENIACUS.

VEGETATION COMMUNITY #6 - R. SPECTABILIS, ALNUS RUBRA (RED ALDER), R. ARMENIACUS

| VEGETATION COMMUNITY #7 -C.STOLONIFERA, R. ARMENIACUS



VICINITY MAPS

SHEET INDEX

- L1.0 EXISTING CONDITIONS
- L1.1 TREE INVENTORY MAP
- L1.2 TREE INVENTORY TABLE (1 OF 2) L1.3 TREE INVENTORY TABLE (2 OF 2)
- L2.0 TESC AND SOIL PREPARATION PLAN L2.1 TESC AND SOIL PREPARATION DETAILS
- L3.0 PLANTING PLAN
- L3.1 PLANT SCHEDULE AND DETAILS
- L4.0 SPECIFICATIONS
- L5.0 MAINTENANCE AND MONITORING NOTES

NOTES

- 1. CONTOURS, PATHS, ROADS, AND PARCEL INFORMATION IS DERIVED FROM GIS DATA ACCESSED THROUGH BELLEVUE GIS DATA PORTAL.
- 2. APPROXIMATE WETLAND INFORMATION DERIVED FROM U.S. FISH & WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY (NWI) WETLANDS MAPPER.
- 3. SIGNIFICANT TREES WERE INVENTORIED BY THE WATERSHED COMPANY ISA CERTIFIED ARBORISTS ON JUNE 17, 2020. GEOSPATIAL DATA WAS COLLECTED IN THE FIELD USING A GPS-ENABLED TABLET AND DATA COLLECTION SOFTWARE. GPS DATA IS BELIEVED RELIABLE FOR GENERAL PLANNING AND MOST REGULATORY PURPOSES. HOWEVER, ACCURACY IS VARIABLE AND SHOULD NOT BE CONSIDERED EQUIVALENT TO A PROFESSIONAL LAND SURVEY. NO WARRANTY IS EXPRESSED OR IMPLIED.

STORATION

WATERSHED

750 Sixth Street South

Kirkland WA 98033

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Science & Design

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SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY.

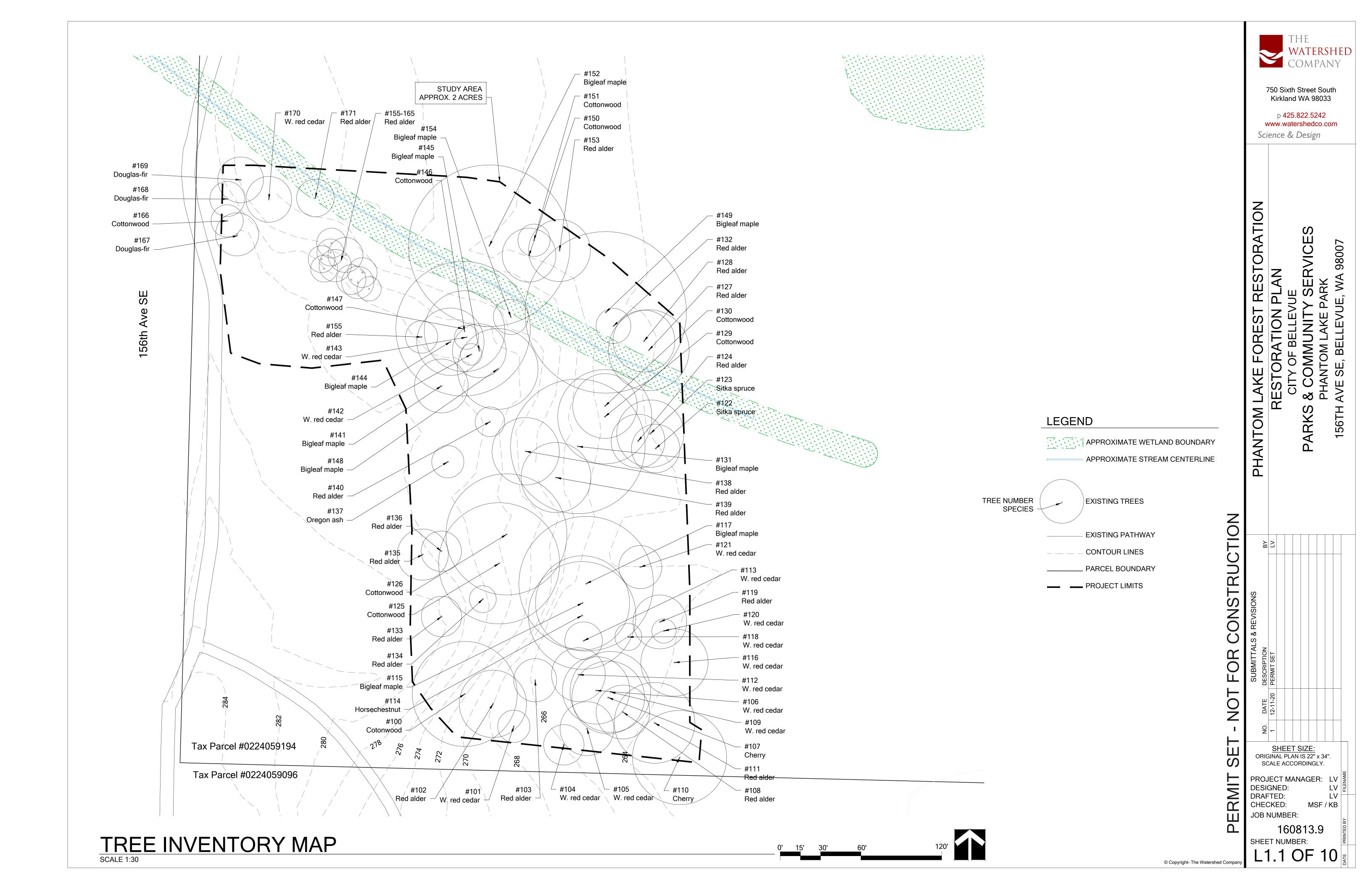
PROJECT MANAGER: LV DESIGNED: DRAFTED: CHECKED: MSF / KB JOB NUMBER:

160813.9 SHEET NUMBER:

L1.0 OF 10

LV |

EXISTING CONDITIONS



		EV / DEC	# STEMS	DBH (IN)	неіднт (ғт)	IUS (FT)	CONDITION
TAG#	TREE NAME	EV	S #	COMB DBH	HEIG	RADIUS	NOO
100	Populus trichocarpa (Black cottonwood)	D	1	42.5	90	39	Good
101	Thuja plicata (Western red cedar)	E	1	36.0	80	12	Fair
102	Alnus rubra (Red alder)	D	1	15.0	50	25	Fair
103	Alnus rubra (Red alder)	D	1	12.0	25	16	Good
104	Thuja plicata (Western red cedar)	E	1	56.0	90	15	Fair
105	Thuja plicata (Western red cedar)	E	1	25.0	55	20	Poor
106	Thuja plicata (Western red cedar)	E	1	36.0	80	25	Good
107	Prunus sp. (Cherry species)	D	1	8.0	30	27	Good
108	Alnus rubra (Red alder)	D	1	20.0	30	20	Fair
109	Thuja plicata (Western red cedar)	E	1	36.0	90	30	Fair
110	Prunus sp. (Cherry species)	D	1	23.0	30	35	Good
111	Alnus rubra (Red alder)	D	1	24.0	60	30	Fair
112	Thuja plicata (Western red cedar)	E	1	10.0	55	20	Good
113	Thuja plicata (Western red cedar)	E	1	40.0	110	14	Good
114	Aesculus hippocastanum (Horsechestnut)	D	3	19.7	70	40	Good
115	Acer macrophyllum (Bigleaf maple)	D	1	21.0	80	35	Good
116	Thuja plicata (Western red cedar)	E	1	37.0	110	25	Good
117	Acer macrophyllum (Bigleaf maple)	D	1	30.0	80	25	Fair

		EV / DEC	# STEMS	MB DBH (IN)	EIGHT (FT)	ADIUS (FT)	ONDITION
118	Thuja plicata (Western red cedar)	E	1	16.0	40	10	Good
119	Alnus rubra (Red alder)	D	1	30.0	60	20	Good
120	Thuja plicata (Western red cedar)	Е	1	14.0	45	9	Fair
121	Thuja plicata (Western red cedar)	E	1	40.0	100	16	Good
122	Picea sitchensis (Sitka spruce)	E	1	30.0	100	18	Fair
123	Picea sitchensis (Sitka spruce)	E	1	30.0	110	25	Fair
124	Alnus rubra (Red alder)	D	1	18.0	60	20	Very Poor
125	Populus trichocarpa (Black cottonwood)	D	1	35.0	110	45	Good
126	Populus trichocarpa (Black cottonwood)	D	1	35.0	110	45	Good
127	Alnus rubra (Red alder)	D	1	17.0	65	30	Fair
128	Alnus rubra (Red alder)	D	1	17.0	45	23	Fair
129	Populus trichocarpa (Black cottonwood)	D	1	17.0	50	35	Fair
130	Populus trichocarpa (Black cottonwood)	D	1	25.0	55	24	Fair
131	Acer macrophyllum (Bigleaf maple)	D	1	38.0	100	50	Good
132	Alnus rubra (Red alder)	D	1	18.0	40	13	Fair
133	Alnus rubra (Red alder)	D	1	10.0	30	15	Poor
134	Alnus rubra (Red alder)	D	1	9.0	25	10	Fair
135	Alnus rubra (Red alder)	D	1	11.0	30	19	Fair
136	Alnus rubra (Red alder)	D	2	8.5	35	15	Fair
137	Fraxinus latifolia (Oregon ash)	D	1	13.0	40	12	Poor

PHANTOM LAKE FOREST RESTORATION
RESTORATION PLAN
CITY OF BELLEVUE
PARKS & COMMUNITY SERVICES
PHANTOM LAKE PARK
156TH AVE SE, BELLEVUE, WA 98007

THE WATERSHED

750 Sixth Street South Kirkland WA 98033

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CONSTRUCTION

SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY.

DESIGNED: DRAFTED: CHECKED:

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L1.2 OF 10

TREE INVENTORY TABLE (1 OF 2)

137	Fraxinus latifolia (Oregon ash)	O EV / DEC	1 # STEMS	(NI) HBQ BW (IN)	(FT) THEIGHT (FT)	2 ADIUS (FT)	NOILIONO Poor
138	Alnus rubra (Red alder)	D	1	14.0	65	25	Fair
139	Alnus rubra (Red alder)	D	2	15.0	65	26	Fair
140	Alnus rubra (Red alder)	D	1	22.0	60	11	Fair
141	Acer macrophyllum (Bigleaf maple)	D	1	25.0	70	20	Good
142	Thuja plicata (Western red cedar)	E	1	11	40	8	Good
143	Thuja plicata (Western red cedar)	E	1	8	20	9	Good
144	Acer macrophyllum (Bigleaf maple)	D	2	22	75	25	Good
145	Acer macrophyllum (Bigleaf maple)	D	1	8	40	20	Good
146	Populus trichocarpa (Black cottonwood)	D	1	30	100	30	Good
147	Populus trichocarpa (Black cottonwood)	D	1	45	110	25	Excellent
148	Acer macrophyllum (Bigleaf maple)	D	1	26	70	30	Good
149	Acer macrophyllum (Bigleaf maple)	D	1	45	100	30	Good
150	Populus trichocarpa (Black cottonwood)	D	1	24	45	20	Good
151	Populus trichocarpa (Black cottonwood)	D	1	19	35	12	Good
152	Acer macrophyllum (Bigleaf maple)	D	2	38.5	100	30	Fair
153	Acer macrophyllum (Bigleaf maple)	D	2	27	70	23	Good
154	Acer macrophyllum (Bigleaf maple)	D	1	24	60	13	Good
155	Alnus rubra (Red alder)	D	1	14	65	12	Good
156	Alnus rubra (Red alder)	D	1	10	45	9	Poor

PHANTOM LAKE FOREST RESTORATION
RESTORATION PLAN
CITY OF BELLEVUE
PARKS & COMMUNITY SERVICES
PHANTOM LAKE PARK
156TH AVE SE, BELLEVUE, WA 98007

THE WATERSHED COMPANY

750 Sixth Street South Kirkland WA 98033

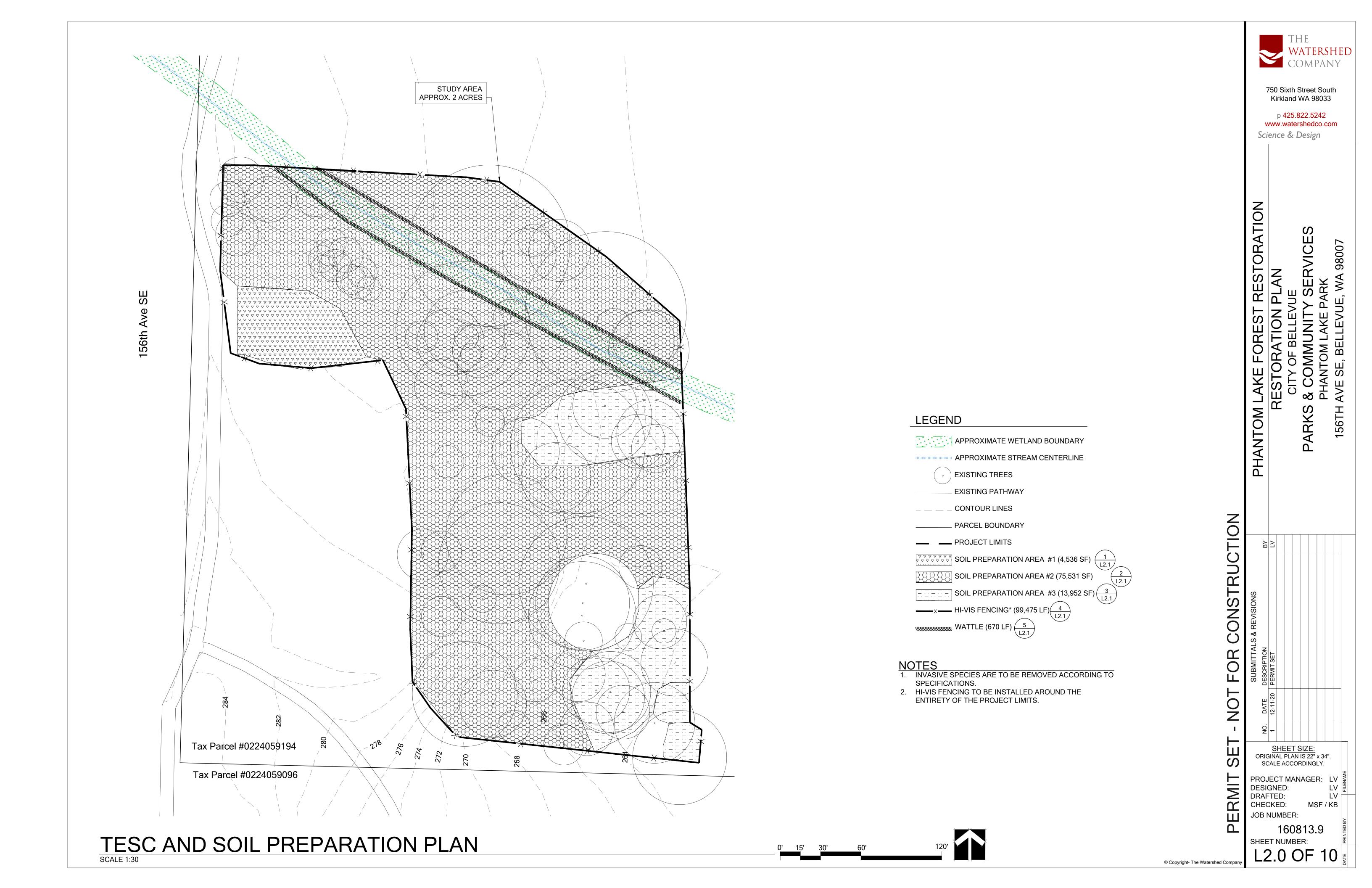
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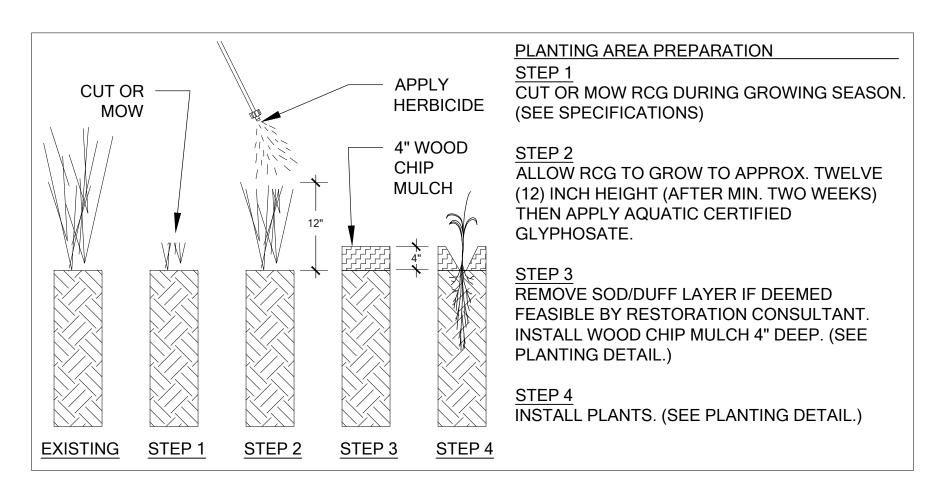
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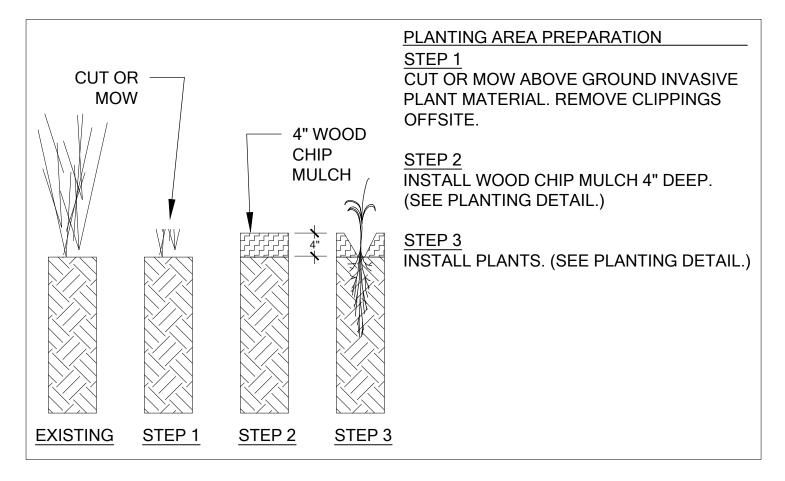
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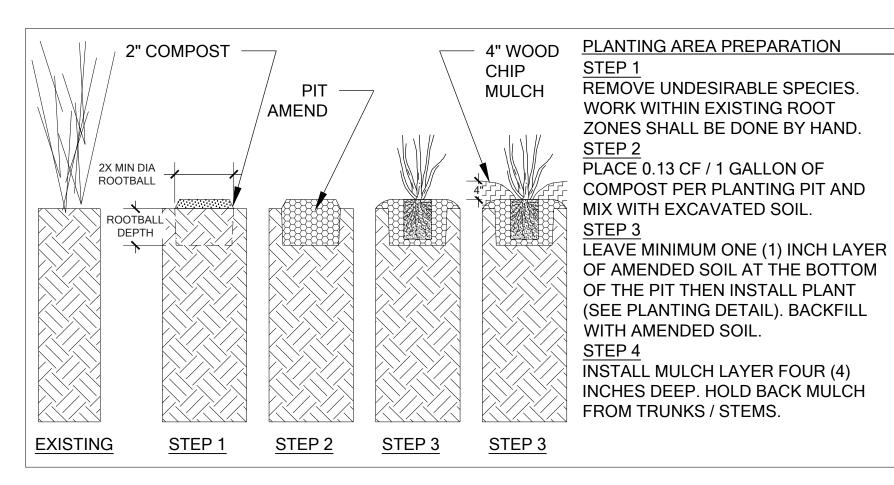
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SOIL PREPARATION AREA 1

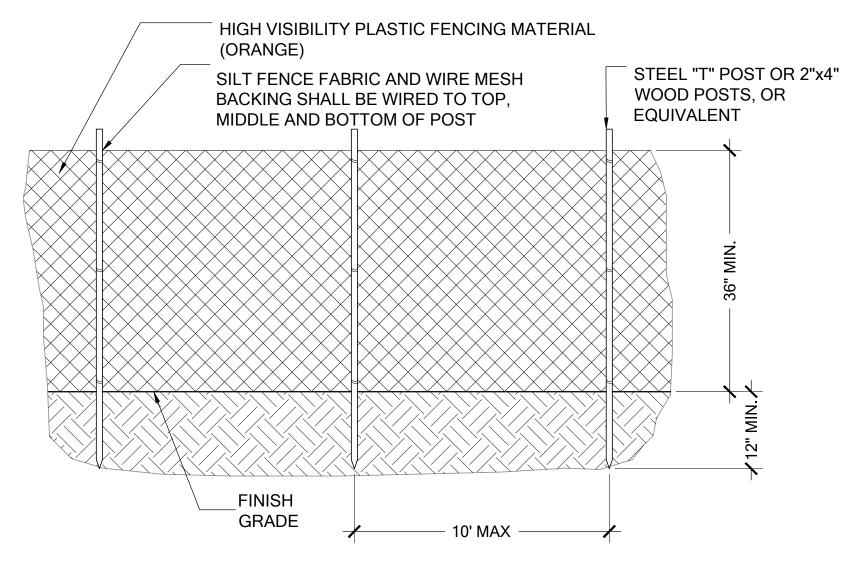
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SOIL PREPARATION AREA 2

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SOIL PREPARATION AREA 3

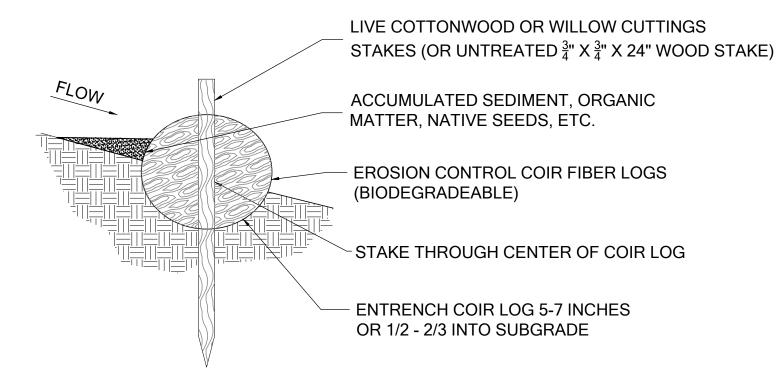
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- 1. DO NOT NAIL OR STAPLE FENCE TO EXISTING TREES OR UTILITY POLES.
- 2. ANY DAMAGE TO THE FENCE SHALL BE REPAIRED IMMEDIATELY.

HI-VIS FENCING

NOT TO SCALE



NOTE: INSTALL STRAW WATTLES PARALLEL TO SLOPE CONTOUR PER SURFACE WATER DESIGN MANUAL - APPENDIX D (D.2.1.2.5)

WATTLE

NOT TO SCALE

ONSTRUCTION ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY. PROJECT MANAGER: LV

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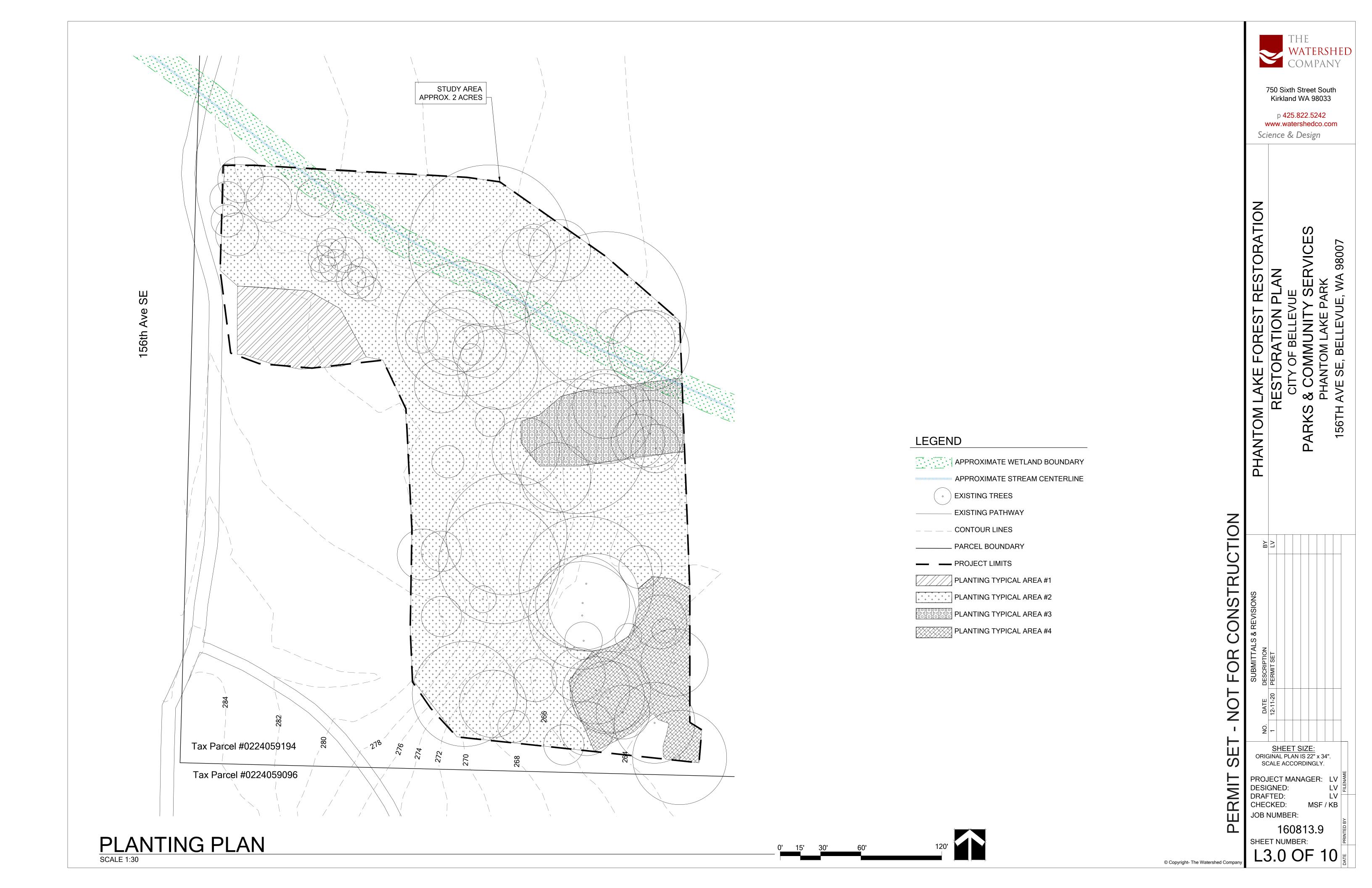
TESC AND SOIL PREPARATION DETAILS

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DESIGNED: DRAFTED: CHECKED:

MSF / KB JOB NUMBER: 160813.9

SHEET NUMBER: L2.1 OF 10



CANDIDATE PLANT LIST AREA 1 (4,536 SF)					
TREES	QUANTITY	SPACING	SIZE		
PICEA SITCHENSIS / SITKA SPRUCE	14	9' O.C.	5 GAL.		
SALIX LUCIDA / PACIFIC WILLOW	14	9' O.C.	1 GAL.		
SALIX SITCHENSIS / SITKA WILLOW	14	9' O.C.	1 GAL.		
SALIX SCOULERIANA / SCOULER'S WILLOW	14	9' O.C.	1 GAL.		
SHRUBS					
CORNUS STOLONIFERA / RED-OSIER DOGWOOD	125	6' O.C.	1 GAL.		

CANDIDATE PLANT LIST AREA 3 (6,050 SF)

TREES

SHRUBS

FRAXINUS LATIFOLIA / OREGON ASH

PICEA SITCHENSIS / SITKA SPRUCE

ROSA PISOCARPA / CLUSTER ROSE

CORNUS STOLONIFERA / RED-OSIER DOGWOOD

CANDIDATE PLANT LIST AREA 2 (75,531 SF)					
TREES	QUANTITY	<u>SPACING</u>	SIZE		
ABIES CONCOLOR / WHITE FIR	227	9' O.C.	1 GAL.		
CALOCEDRUS DECURRENS / INCENSE CEDAR	227	9' O.C.	1 GAL.		
SEQUOIADENDRON GIGANTEUM / GIANT SEQUOIA	227	9' O.C.	1 GAL.		
THUJA PLICATA / WESTERN REDCEDAR	227	9' O.C.	1 GAL.		
SHRUBS					
AMELANCHIER ALNIFOLIA / SERVICEBERRY	352	6' O.C.	1 GAL.		
HOLODISCUS DISCOLOR / OCEANSPRAY	352	6' O.C.	1 GAL.		
MAHONIA AQUIFOLIUM / TALL OREGON GRAPE	352	6' O.C.	1 GAL.		
OEMLERIA CERASIFORMIS / OSOBERRY	352	6' O.C.	1 GAL.		
RUBUS SPECTABILIS / SALMONBERRY	352	6' O.C.	1 GAL.		
SAMBUCUS RACEMOSA / RED ELDERBERRY	352	6' O.C.	1 GAL.		

	_
SIZE	<u>T</u>
1" CAL.	Р
6' TALL	Т
	<u>s</u>
1 GAL.	А

1 GAL.

SPACING

9' O.C.

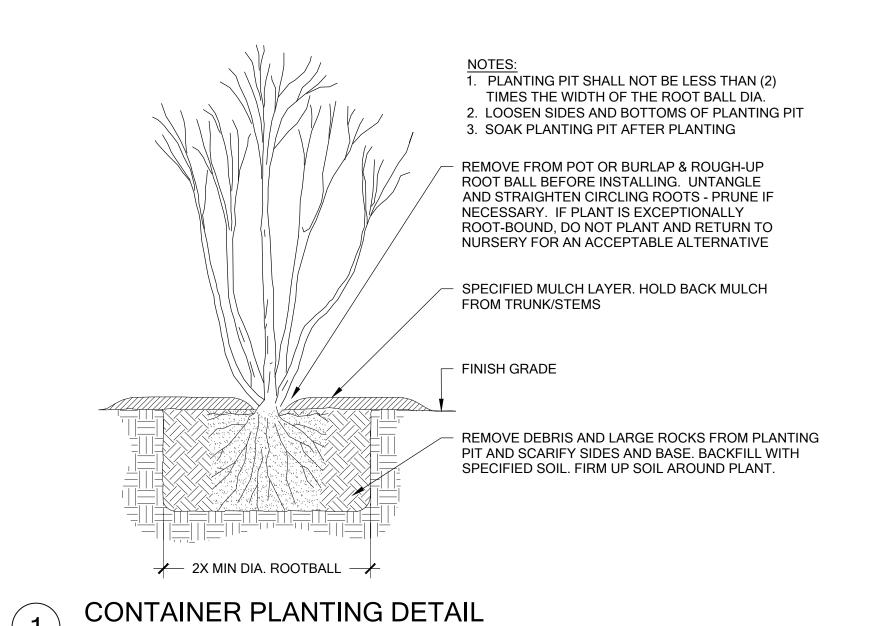
9' O.C.

6' O.C.

6' O.C.

QUANTITY

CANDIDATE PLANT LIST AREA 4 (7,910 SF)					
TREES	QUANTITY	<u>SPACING</u>	SIZE		
PSEUDOTSUGA MENZIESII / DOUGLAS-FIR	12	9' O.C.	1 GAL.		
THUJA PLICATA	12	9' O.C.	1 GAL.		
SHRUBS					
ACER CIRCINATUM / VINE MAPLE	19	6' O.C.	1 GAL.		
RUBUS SPECTABILIS / SALMONBERRY	19	6' O.C.	1 GAL.		
VACCINIUM PARVIFOLIUM / RED HUCKLEBERRY	19	6' O.C.	1 GAL.		
GROUNDCOVER					
GAULTHERIA SHALLON / SALAL	50	3' O.C.	1 GAL.		
MAHONIA NERVOSA / DULL MAHONIA	50	3' O.C.	1 GAL.		
POLYSTICHUM MUNITUM / WESTERN SWORDFERN	50	3' O.C.	1 GAL.		



PHANTOM LAKE FOREST RESTORATION
RESTORATION PLAN
CITY OF BELLEVUE

Scale: NTS

750 Sixth Street South Kirkland WA 98033

p 425.822.5242

www.watershedco.com

Science & Design

SUBMITTALS & REVISIONS

NO. DATE DESCRIPTION

NO. DATE DESCRIPTION

SHEET SIZE:
ORIGINAL PERMIT SET

ORIGINAL PLAN IS 22" x 34".
SCALE ACCORDINGLY.

DESIGNED: DRAFTED:

CHECKED:

160813.9

L3.1 OF 10

PLANT SCHEDULE AND DETAILS

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GENERAL NOTES

QUALITY ASSURANCE

- 1. PLANTS SHALL MEET OR EXCEED THE SPECIFICATIONS OF FEDERAL, STATE, AND LOCAL LAWS REQUIRING INSPECTION FOR PLANT DISEASE AND INSECT CONTROL
- 2. PLANTS SHALL BE HEALTHY, VIGOROUS, AND WELL-FORMED, WITH WELL DEVELOPED, FIBROUS ROOT SYSTEMS, FREE FROM DEAD BRANCHES OR ROOTS. PLANTS SHALL BE FREE FROM DAMAGE CAUSED BY TEMPERATURE EXTREMES, LACK OR EXCESS OF MOISTURE, INSECTS, DISEASE, AND MECHANICAL INJURY. PLANTS IN LEAF SHALL BE WELL FOLIATED AND OF GOOD COLOR. PLANTS SHALL BE HABITUATED TO THE OUTDOOR ENVIRONMENTAL CONDITIONS INTO WHICH THEY WILL BE PLANTED (HARDENED-OFF)
- TREES WITH DAMAGED, CROOKED, MULTIPLE OR BROKEN LEADERS WILL BE REJECTED. WOODY PLANTS WITH ABRASIONS OF THE BARK OR SUN SCALD WILL BE REJECTED.
- 4. NOMENCLATURE: PLANT NAMES SHALL CONFORM TO FLORA OF THE PACIFIC NORTHWEST BY HITCHCOCK AND CRONQUIST. UNIVERSITY OF WASHINGTON PRESS, 2018 AND/OR TO A FIELD GUIDE TO THE COMMON WETLAND PLANTS OF WESTERN WASHINGTON & NORTHWESTERN OREGON, ED. SARAH SPEAR COOKE. SEATTLE AUDUBON SOCIETY, 1997.

DEFINITIONS

- PLANTS/PLANT MATERIALS. PLANTS AND PLANT MATERIALS SHALL INCLUDE ANY LIVE PLANT MATERIAL USED ON THE PROJECT. THIS INCLUDES BUT IS NOT LIMITED TO CONTAINER GROWN, B&B OR BAREROOT PLANTS: LIVE STAKES AND FASCINES (WATTLES); TUBERS, CORMS, BULBS, ETC.; SPRIGS, PLUGS. AND LINERS.
- CONTAINER GROWN. CONTAINER GROWN PLANTS ARE THOSE WHOSE ROOTBALLS ARE ENCLOSED IN A POT OR BAG IN WHICH THAT PLANT GREW

SUBSTITUTIONS

- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN SPECIFIED MATERIALS IN ADVANCE IF SPECIAL GROWING, MARKETING OR OTHER ARRANGEMENTS MUST BE MADE IN ORDER TO SUPPLY SPECIFIED MATERIALS.
- 2. SUBSTITUTION OF PLANT MATERIALS NOT ON THE PROJECT LIST WILL NOT BE PERMITTED UNLESS AUTHORIZED IN WRITING BY THE RESTORATION CONSULTANT.
- IF PROOF IS SUBMITTED THAT ANY PLANT MATERIAL SPECIFIED IS NOT OBTAINABLE, A PROPOSAL WILL BE CONSIDERED FOR USE OF THE NEAREST EQUIVALENT SIZE OR ALTERNATIVE SPECIES, WITH CORRESPONDING ADJUSTMENT OF CONTRACT PRICE.
- SUCH PROOF WILL BE SUBSTANTIATED AND SUBMITTED IN WRITING TO THE CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION.

INSPECTION

- PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE RESTORATION CONSULTANT FOR CONFORMANCE TO SPECIFICATIONS, EITHER AT TIME OF DELIVERY ON-SITE OR AT THE GROWER'S NURSERY. APPROVAL OF PLANT MATERIALS AT ANY TIME SHALL NOT IMPAIR THE SUBSEQUENT RIGHT OF INSPECTION AND REJECTION DURING PROGRESS OF THE WORK.
- PLANTS INSPECTED ON SITE AND REJECTED FOR NOT MEETING SPECIFICATIONS MUST BE REMOVED IMMEDIATELY FROM SITE OR RED-TAGGED AND REMOVED AS SOON AS POSSIBLE.
- THE RESTORATION CONSULTANT MAY ELECT TO INSPECT PLANT MATERIALS AT THE PLACE OF GROWTH. AFTER INSPECTION AND ACCEPTANCE, THE RESTORATION CONSULTANT MAY REQUIRE THE INSPECTED PLANTS BE LABELED AND RESERVED FOR PROJECT. SUBSTITUTION OF THESE PLANTS WITH OTHER INDIVIDUALS, EVEN OF THE SAME SPECIES AND SIZE, IS UNACCEPTABLE.

MEASUREMENT OF PLANTS

- 1. PLANTS SHALL CONFORM TO SIZES SPECIFIED UNLESS SUBSTITUTIONS ARE MADE AS OUTLINED IN THIS CONTRACT.
- 2. HEIGHT AND SPREAD DIMENSIONS SPECIFIED REFER TO MAIN BODY OF PLANT AND NOT BRANCH OR ROOT TIP TO TIP. PLANT DIMENSIONS SHALL BE MEASURED WHEN THEIR BRANCHES OR ROOTS ARE IN THEIR NORMAL POSITION.
- 3. WHERE A RANGE OF SIZE IS GIVEN, NO PLANT SHALL BE LESS THAN THE MINIMUM SIZE AND AT LEAST 50% OF THE PLANTS SHALL BE AS LARGE AS THE MEDIAN OF THE SIZE RANGE. (EXAMPLE: IF THE SIZE RANGE IS 12" TO 18", AT LEAST 50% OF PLANTS MUST BE 15" TALL.).

SUBMITTALS

PROPOSED PLANT SOURCES

WITHIN 45 DAYS AFTER AWARD OF THE CONTRACT, SUBMIT A COMPLETE LIST OF PLANT MATERIALS PROPOSED TO BE PROVIDED DEMONSTRATING CONFORMANCE WITH THE REQUIREMENTS SPECIFIED. INCLUDE THE NAMES AND ADDRESSES OF ALL GROWERS AND NURSERIES.

PRODUCT CERTIFICATES

- 1. PLANT MATERIALS LIST SUBMIT DOCUMENTATION TO CONSULTANT AT LEAST 30 DAYS PRIOR TO START OF WORK UNDER THIS SECTION THAT PLANT MATERIALS HAVE BEEN ORDERED. ARRANGE PROCEDURE FOR INSPECTION OF PLANT MATERIAL WITH CONSULTANT AT TIME OF SUBMISSION
- 2. HAVE COPIES OF VENDOR'S OR GROWERS' INVOICES OR PACKING SLIPS FOR ALL PLANTS ON SITE DURING INSTALLATION. INVOICE OR PACKING SLIP SHOULD LIST SPECIES BY SCIENTIFIC NAME, QUANTITY, AND DATE DELIVERED (AND GENETIC ORIGIN IF THAT INFORMATION WAS PREVIOUSLY REQUESTED)

DELIVERY, HANDLING, & STORAGE

NOTIFICATION

CONTRACTOR MUST NOTIFY CONSULTANT 48 HOURS OR MORE IN ADVANCE OF DELIVERIES SO THAT CONSULTANT MAY ARRANGE FOR INSPECTION.

PLANT MATERIALS

- TRANSPORTATION DURING SHIPPING, PLANTS SHALL BE PACKED TO PROVIDE PROTECTION AGAINST CLIMATE EXTREMES, BREAKAGE AND DRYING. PROPER VENTILATION AND PREVENTION OF DAMAGE TO BARK, BRANCHES, AND ROOT SYSTEMS MUST BE ENSURED.
- 2. SCHEDULING AND STORAGE PLANTS SHALL BE DELIVERED AS CLOSE TO PLANTING AS POSSIBLE. PLANTS IN STORAGE MUST BE PROTECTED AGAINST ANY CONDITION THAT IS DETRIMENTAL TO THEIR CONTINUED HEALTH AND VIGOR
- 3. HANDLING PLANT MATERIALS SHALL NOT BE HANDLED BY THE TRUNK, LIMBS, OR FOLIAGE BUT ONLY BY THE CONTAINER, BALL BOX, OR OTHER PROTECTIVE STRUCTURE, EXCEPT BAREROOT PLANTS SHALL BE KEPT IN BUNDLES UNTIL PLANTING AND THEN HANDLED CAREFULLY BY THE TRUNK OR STEM.
- 4. LABELS PLANTS SHALL HAVE DURABLE, LEGIBLE LABELS STATING CORRECT SCIENTIFIC NAME AND SIZE. TEN PERCENT OF CONTAINER GROWN PLANTS IN INDIVIDUAL POTS SHALL BE LABELED. PLANTS SUPPLIED IN FLATS, RACKS, BOXES, BAGS, OR BUNDLES SHALL HAVE ONE LABEL PER GROUP.

WARRANTY

PLANT WARRANTY

PLANTS MUST BE GUARANTEED TO BE TRUE TO SCIENTIFIC NAME AND SPECIFIED SIZE, AND TO BE HEALTHY AND CAPABLE OF VIGOROUS GROWTH.

REPLACEMENT

- 1. PLANTS NOT FOUND MEETING ALL OF THE REQUIRED CONDITIONS AT THE CONSULTANT'S DISCRETION MUST BE REMOVED FROM SITE AND REPLACED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- 2. PLANTS NOT SURVIVING AFTER ONE YEAR TO BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PLANT MATERIAL

GENERAL

- PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES UNDER CLIMATIC CONDITIONS SIMILAR TO OR MORE SEVERE THAN THOSE OF THE PROJECT SITE.
- 2. PLANTS SHALL BE TRUE TO SPECIES AND VARIETY OR SUBSPECIES. NO CULTIVARS OR NAMED VARIETIES SHALL BE USED UNLESS SPECIFIED AS SUCH.

QUANTITIES

SEE PLANT LIST ON ACCOMPANYING PLANS AND PLANT SCHEDULES.

ROOT TREATMENT

- CONTAINER GROWN PLANTS (INCLUDES PLUGS): PLANT ROOT BALLS MUST HOLD TOGETHER WHEN THE PLANT IS REMOVED FROM THE POT, EXCEPT THAT A SMALL AMOUNT OF LOOSE SOIL MAY BE ON THE TOP OF THE ROOTBALL.
- 2. PLANTS MUST NOT BE ROOT-BOUND; THERE MUST BE NO CIRCLING ROOTS PRESENT IN ANY PLANT INSPECTED.
- ROOTBALLS THAT HAVE CRACKED OR BROKEN WHEN REMOVED FROM THE CONTAINER SHALL BE REJECTED.

INVASIVE REMOVAL AND MULCHING

GENERAL NOTES

PROJECT LIMITS ARE INCLUDED IN THE PLANS. AND WILL BE DEMARCATED BY THE CITY OF BELLEVUE PRIOR TO THE START OF WORK. CONTRACTOR WILL COVER ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PERFORMANCE OF ALL WORK INCLUDED IN THE SCOPE OF WORK. ALL FIELD WORK SHALL BE PERFORMED UNDER THE SUPERVISION OF A QUALIFIED CREW SUPERVISOR THAT HAS RELEVANT FIELD EXPERIENCE IN WETLAND RESTORATION/MAINTENANCE. ALL DEBRIS SHALL BE PROPERLY DISPOSED OF OFF-SITE UNLESS THERE IS PRIOR APPROVAL BY CITY OF BELLEVUE STAFF TO COMPOST ONSITE. CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL LOCAL, STATE AND FEDERAL GUIDELINES WHEN APPLYING PESTICIDES AND HERBICIDES TO THE SITE. CONTRACTOR IS RESPONSIBLE FOR POSTING ALL REQUIRED PUBLIC NOTIFICATIONS AND REMOVING ALL NECESSARY SITE SIGNAGE WITHIN 24 HOURS AFTER RE-ENTRY PERIOD. THE CONTRACTOR WILL ENSURE THAT ALL EMPLOYEES COMPLY WITH ALL CITY OF BELLEVUE, WISHA, AND WASHINGTON STATE INDUSTRIAL REGULATIONS AND PRACTICES. THE CONTRACTOR MUST USE THE WSDA PESTICIDE APPLICATION RECORD (VERSION 1) FORM WHICH CAN BE FOUND AT HTTPS://AGR.WA.GOV/PESTFERT/PESTICIDES/DOCS/RECFORM4226.PDF. THE CONTRACTOR MUST PROVIDE THE CITY WITH ALL PESTICIDE APPLICATION RECORDS WITHIN TWENTY-FOUR HOURS OF APPLICATION PREVAILING WAGES ARE REQUIRED. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PREVAILING WAGE RULING FROM L&I.

CITY OF BELLEVUE PARKS & COMMUNITY SERVICES NATURAL RESOURCE **DIVISION CONTACT;**

> JAMMIE KINGHAM **BELLEVUE PARKS** 450 110 IH AVE NE BELLEVUE, WA 98004 JKINGHAM@BELLEVUEWA.GOV

WORK DESCRIPTION

1) MANUAL, MECHANICAL AND CHEMICAL REMOVAL OF ALL INVASIVE/NOXIOUS PLANTS IDENTIFIED ON THE KING COUNTY NOXIOUS

HTTPS://WWW.KINGCOUNTY.GOV/SERVICES/ENVIRONMENT/ANIMALS-AND-PLANTS/NOXIOUS-WEEDS/LAWS/LIST.ASPX. SEE TREATMENT

- METHODS FOR KEY TARGET SPECIES AND OPTIMAL TIMING FOR COMMON WEEDING ACTIVITIES AND SPECIFICATIONS. TREATMENT FOR ANY INVASIVE / NOXIOUS PLANTS DISCOVERED ON-SITE THAT ARE NOT LISTED IN THE KEY TARGET SPECIES TREATMENT METHODS BELOW MUST FIRST BE APPROVED BY THE CITY OF BELLEVUE.
- 2) ALL HERBICIDES USED MUST BE APPROVED FOR AQUATIC SITES AND ALL APPLICATIONS MUST BE MADE UNDER DIRECT SUPERVISION OF A LICENSED PESTICIDE APPLICATOR. APPLICATION METHODS MAY INCLUDE LANCE, CUT STUMP, FOLIAR SPRAY, CUT & DAB, OR STEM INJECTION. SEE DESCRIPTION OF HERBICIDE APPLICATION METHODS.
- 3) PHYSICAL AND CHEMICAL TREATMENTS OF ALL INVASIVE SPECIES SHOULD BE CONDUCTED TWO-THREE TIMES IN 2021 BEFORE NOVEMBER

4) AFTER INITIAL REMOVAL OF ALL INVASIVE PLANTS, THE ENTIRE PROJECT

- SITE SHOULD BE MULCHED WITH 4" OF GUARANTEED, WEED-FREE COURSE WOOD CHIP MULCH. 5) CONTRACTOR MUST PROVIDE NOTIFICATION AND COORDINATION OF ALL
- ACTIVITIES WITH JAMMIE KINGHAM NO LESS THAN 72 HOURS BEFORE BEGINNING WORK
- 6) ALL WORK SHALL BE PERFORMED BETWEEN THE HOURS OF 7:00AM AND 5:00PM MONDAY THROUGH FRIDAY.

TREATMENT METHODS FOR KEY TARGET SPECIES

- REED CANARY GRASS SHOULD BE MOWED OR CUT TO GROUND LEVEL BEFORE GOING TO SEED. ONCE IT REACHES 12" HEIGHT AFTER MOWING, THE REGROWTH SHOULD BE SPRAYED WITH AN AQUATIC-APPROVED HERBICIDE CONTAINING 2% GLYPHOSATE AND 1% AQUATIC SURFACTANT. REPEAT TREATMENT THROUGHOUT GROWING SEASON ONCE IT REACHES 12".
- HIMALAYAN BLACKBERRY SHOULD BE MOWED DOWN TO GROUND LEVEL IN EARLY SPRING. WHEN THE REGROWTH HAS REACHED AT LEAST 18" HIGH AND IS IN FULL LEAF (ABOUT 6 WEEKS TO 2 MONTHS AFTER MOWING), IT SHOULD BE SPRAYED WITH 1-2% TRICLOPYR AND 1% SURFACTANT. IF THERE IS VISIBLE RE-GROWTH AT THE TIME OF NATIVE PLANT INSTALLATION, THE ROOT BALL SHALL BE GRUBBED OUT AND REPLACED WITH A NATIVE PLANT. COMPLETE COVERAGE OF ALL CANES AND LEAVES IS ESSENTIAL FOR MAXIMUM EFFECTIVENESS. REPEAT TREATMENT THROUGHOUT GROWING SEASON.
- MORNING GLORY SHOULD BE TREATED WITH AQUATIC-APPROVED HERBICIDE CONTAINING 2% OF GLYPHOSATE WITH 1% SURFACTANT.
- ENGLISH IVY GROWING ON THE GROUND SHOULD BE HAND PULLED AND ALL ROOTS REMOVED. ENGLISH IVY GROWING ON TREES SHOULD BE CUT AT CHEST HEIGHT, CLEARING A 1- OR 2-FOOT-WIDE SECTION ALL THE WAY AROUND THE TREE TRUNK, TAKING CARE NOT TO DAMAGE THE TRUNK. CLIPPERS, LOPPERS OR EVEN A SMALL SAW MAY BE NEEDED TO CUT THROUGH THE VINES DEPENDING ON THEIR THICKNESS. PULL OR PRY THE VINES OFF THAT SMALL SECTION. LEAVE THE VINES ABOVE THE CLEARED SPACE TO DIE AND DO NOT TRY TO PULL THEM OFF THE TREE; PULLING ON THEM COULD DAMAGE THE TREE'S BARK. AS THE VINES DIE OVER 1 TO 2 YEARS, THEY WILL GRADUALLY DRY UP AND FALL OFF THE TREE.
- INVASIVE TREES OR WOODY SHRUBS SHOULD BE CONTROLLED BY PULLING OR TREATING WITH A CUT STUMP/FRILLING METHOD USING AQUATIC-APPROVED HERBICIDE CONTAINING 100%

TRICLOPYR OR EZ JECT COPPERHEAD IMAZAPYR PELLETS. IF ANY OF THESE SPECIES HAVE A DIAMETER LESS THAN 1 INCH, REMOVE THE ENTIRE PLANT WITH A WEED WRENCH

OPTIMAL TIMING FOR COMMON WEEDING ACTIVITIES AND SPECIFICATIONS:

 REED CANARY GRASS SHOULD BE MOWED OR CUT DOWN TO GROUND LEVEL, IDEALLY IN SPRING OR SUMMER AND TREATED WITH AN AQUATIC-APPROVED HERBICIDE MULTIPLE TIMES DURING GROWING SEASON TO MINIMIZE REGENERATION

- HIMALAYAN BLACKBERRY ROOTS SHOULD BE COMPLETELY REMOVED FROM THE SOIL AND REMOVED FROM SITE ANYTIME DURING THE YEAR WHEN REGROWTH IS EXPOSED. FOLIAR SPRAY OR CUT/DAB IN SPRING-FALL WITH AN AQUATIC-APPROVED HERBICIDE WHEN REGROWTH HAS REACHED 18". EARLY MORNING SPRAY IS RECOMMENDED TO AVOID ENDANGERING POLLINATOR
- MORNING GLORY SHOULD BE ROUTINELY PULLED FROM NATIVE PLANTS AND GRUBBED WITHIN 12" OF WOODY STEMS. CHEMICAL TREATMENT IS DETERMINED NECESSARY, FOLIAR SPRAY IS MOST EFFECTIVE FOLLOWING FLOWERING TIME IN LATE FALL BEFORE DIEBACK.
- ENGLISH IVY ON THE GROUND SHOULD BE HAND PULLED AND ALL ROOTS REMOVED. ENGLISH IVY ON TREES SHOULD BE CUT AT CHEST HEIGHT, CLEARING A 1- OR 2-FOOT-WIDE SECTION ALL THE WAY AROUND THE TREE TRUNK, TAKING CARE NOT TO DAMAGE THE TRUNK. CLIPPERS, LOPPERS OR EVEN A SMALL SAW MAY BE NEEDED TO CUT THROUGH THE VINES DEPENDING ON THEIR THICKNESS. PULL OR PRY THE VINES OFF THAT SMALL SECTION. LEAVE THE VINES ABOVE THE CLEARED SPACE TO DIE AND DO NOT TRY TO PULL THEM OFF THE TREE; PULLING ON THEM COULD DAMAGE THE TREE'S BARK. AS THE VINES DIE OVER 1 TO 2 YEARS, THEY WILL GRADUALLY DRY UP AND FALL OFF THE TREE.
- INVASIVE TREES OR WOODY SHRUBS WITHIN THE ENHANCEMENT AREA (ENGLISH HOLLY, ENGLISH LAUREL AND CHERRY LAUREL MOUNTAIN ASH, ENGLISH HAWTHORN, WILD AND DOMESTIC CHERRY, BUTTERFLY BUSH, SCOT'S BROOM) SHOULD BE CONTROLLED DURING THE ACTIVE GROWING SEASON AND AFTER FULLY LEAFING OUT.

A DESCRIPTION OF HERBICIDE APPLICATION METHODS IS PROVIDED BELOW FOLIAR: APPLIED TO LEAVES AND GREEN STEMS. AVOID DRIFT AT

- CUT & DAB: CUT STEMS OF TARGET WEED SPECIES BETWEEN 6"AND 12" ABOVE THE GROUND SURFACE, AND IMMEDIATELY APPLY AN HERBICIDE TO THE FRESH CUT
- FRILL & TREAT: FOR ALL INVASIVE TREES OR WOODY SHRUBS GREATER THAN 3" DIAMETER AT 6" ABOVE GROUND, DO NOT CUT THE TREE/SHRUB DOWN, BUT INSTEAD CLEAR BRANCHES NECESSARY TO ACCESS THE MAIN TRUNK(S). MAKE A SERIES OF DOWNWARD ANGLED CUTS THROUGH THE BARK AND CAMBIUM LEAVING THE FRILL CONNECTED TO THE TREE. MAKE THESE CUTS COMPLETELY AROUND THE ENTIRE CIRCUMFERENCE OF THE TRUNK 12" ABOVE THE GROUND SURFACE. IMMEDIATELY APPLY HERBICIDE TO THE CAMBIUM OF THE FRESHLY FRILLED TRUNK AT THE RECOMMENDED RATE
- LANCE: USED FOR WOODY INVASIVE SPECIES GREATER THAN 2.5" DIAMETER AT 6" ABOVE GROUND SURFACE. DO NOT CUT THE TREE/SHRUB DOWN, BUT INSTEAD CLEAR BRANCHES NECESSARY TO ACCESS THE MAIN TRUNK(S) AND USE A LANCE PER THE MANUFACTURER'S INSTRUCTIONS TO INJECT IMAZAPYR PELLETS INTO THE TREE AT THE RATE OUTLINED IN THE MANUFACTURER'S INSTRUCTIONS. FOR TREES GREATER THAN 6" DIAMETER AT 6" ABOVE THE GROUND, CONSULT WITH CITY OF BELLEVUE PARKS STAFF BEFORE TREATING.
- CUT STUMP: APPLIED TO WOODY INVASIVE SPECIES SMALLER THAN 2.5" DIAMETER AT 6" ABOVE GROUND. CUT THE TREE/SHRUB DOWN TO A STUMP 6 INCHES HIGH. APPLY TRICLOPYR IMMEDIATELY TO ENTIRE SURFACE OF THE STUMP/STEM AT THE RATES OUTLINED IN THE MANUFACTURER'S INSTRUCTIONS. CUT ALL BRANCHES TO LENGTHS 18" OR LESS AND SCATTER. AVOIDING DIRECT GROUND CONTACT.
- BLUE DYE MUST BE USED TO VERIFY FOLIAR CHEMICAL APPLICATION OR CUT-DAB/FRILL ON 100% OF TARGET WEED SPECIES. WOODY MATERIAL THAT IS LANCED SHALL HAVE VISIBLE SHELL CASINGS.
- CHEMICAL APPLICATIONS SHALL RESULT IN LESS THAN 5% OFF-TARGET DAMAGE TO NATIVE PLANTS. CHEMICALLY TREATED SPECIES SHOULD SHOW CLEAR SIGNS OF
- DIEBACK STARTING WITHIN 2 MONTHS OF TREATMENT.
- THE CONTRACTOR SHOULD PLACE REQUIRED SIGNAGE PRIOR TO CHEMICAL APPLICATIONS IN FRONT OF THE AREA TREATED AND AT KEY POINTS ALONG THE PUBLIC TRAILS CONSISTENT WITH MANUFACTURER'S LABEL. FOR EXAMPLE: LABELS THAT LIMIT ENTRY UNTIL AFTER A PRODUCT IS DRY SHOULD BE POSTED DURING APPLICATION AND UNTIL THE PRODUCT IS DRY. THE CONTRACTOR SHOULD REMOVE SIGNAGE AS SOON AS CONDITIONS ALLOW.

NATERSHED

750 Sixth Street South Kirkland WA 98033

p 425.822.5242 www.watershedco.com

Science & Design

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PHANTO

0 HR S Z 0 0 Ш SHEET SIZE:

ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY. PROJECT MANAGER: LV **DESIGNED**:

DRAFTED: CHECKED: MSF / KB JOB NUMBER:

160813.9 SHEET NUMBER:

LV |

MAINTENANCE AND MONITORING NOTES

THIS PLAN HAS BEEN PREPARED AS PART OF THE FOREST RESTORATION AT PHANTOM LAKE PARK. THE LOCATION OF THE PROJECT IS ON THE WEST SIDE OF PHANTOM LAKE WITHIN THE LAKE HILLS GREENBELT AT 2064-2098 156TH AVE SE, BELLEVUE WA. THIS RESTORATION PLAN SEEKS TO ENHANCE SUBSTANTIAL PORTIONS OF ECOLOGICALLY DEGRADED AREAS WITHIN THE PROJECT LIMITS AT PHANTOM LAKE PARK. THE RESTORATION OF THIS AREA RESULTS IN NO NET LOSS OF OVERALL TREE COVERAGE. THE PROPOSED RESTORATION AREA CURRENTLY LACKS A NATIVE UNDERSTORY AND EVERGREEN CANOPY AND IS DOMINATED BY NON-NATIVE SPECIES SUCH AS HIMALAYAN BLACKBERRY, REED CANARY GRASS, MORNING GLORY, AND

TO ACHIEVE THE ENHANCEMENT OBJECTIVES, THE PLAN CALLS FOR THE RESTORATION OF OVER 2 ACRES OF PHANTOM LAKE PARK THROUGH THE REMOVAL OF INVASIVE SPECIES AND THE PLANTING OF NATIVE TREES, SHRUBS, AND GROUNDCOVER. THE RESTORATION AREA COVERS 94,019 SQUARE FEET. TREE SPECIES PROPOSED INCLUDE WHITE FIR, INCENSE CEDAR, DOUGLAS-FIR, INCENSE CEDAR, WESTERN REDCEDAR, SITKA SPRUCE, PACIFIC WILLOW, SITKA WILLOW, SCOULER'S WILLOW, OREGON ASH, AND GIANT SEQUOIA. SHRUB SPECIES PROPOSED INCLUDE SERVICEBERRY, OCEANSPRAY, SALMONBERRY, RED ELDERBERRY, VINE MAPLE, RED HUCKLEBERRY, RED-OSIER DOGWOOD, CLUSTER ROSE, TALL OREGON GRAPE, AND OSOBERRY. GROUNDCOVER SPECIES INCLUDE WESTERN SWORDFERN, SALAL, AND DULL MAHONIA. PLANTS ON THIS LIST WERE CHOSEN WITH A CHANGING CLIMATE IN MIND, AND CAN TOLERATE DRIER SUMMERS AND MORE SPORADIC RAINFALL AS ANTICIPATED FOR THE NEXT CENTURY.

MITIGATION NOTES

1.1 OVERVIEW

THIS RESTORATION AREA WILL BE CONTINUALLY MAINTAINED AND MONITORED BY CITY OF BELLEVUE PARKS & COMMUNITY SERVICES NATURAL RESOURCE DIVISION. THE PLAN DETAILS METHODS OF INVASIVE SPECIES REMOVAL, SPECIFIES APPROPRIATE SPECIES FOR PLANTING AND PLANTING TECHNIQUES, DESCRIBES PROPER MAINTENANCE ACTIVITIES, AND SETS FORTH PERFORMANCE STANDARDS. THIS WILL ENSURE THAT RESTORATION PLANTINGS WILL BE MAINTAINED, MONITORED, AND SUCCESSFULLY ESTABLISHED FOLLOWING IMPLEMENTATION. COMPONENTS OF THE MAINTENANCE AND MONITORING PLAN ARE DETAILED BELOW.

1.2 GOALS

- IMPROVE FOREST FUNCTION BY LIMITING INVASIVE AND/OR NOXIOUS WEED COVER ON-SITE.
- 2. IMPROVE FOREST FUNCTION BY ESTABLISHING DENSE VEGETATION THAT IS APPROPRIATE TO THE ECO-REGION AND SITE.
- INCREASE HABITAT FUNCTION BY ADDING HABITAT COMPLEXITY. PROVIDE REFUGE FOR SMALL MAMMALS AND INVERTEBRATES. PROVIDE PERCHING, NESTING, AND FORAGING HABITAT FOR NATIVE

1.3 PERFORMANCE STANDARDS

THE STANDARDS LISTED BELOW WILL BE USED TO JUDGE THE SUCCESS OF THE PLAN OVER TIME.

SURVIVAL:

a. ACHIEVE 100% SURVIVAL OF INSTALLED PLANTS AT THE END OF YEAR 1. THIS STANDARD MAY BE MET THROUGH PLANT ESTABLISHMENT OR THROUGH REPLANTING AS NECESSARY TO ACHIEVE THE REQUIRED NUMBERS.

2. TREE AND SHRUB COVER:

- a. ACHIEVE 40% COVER OF SHRUBS AND SAPLING TREES BY YEAR 2. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS COVER STANDARD.
- b. ACHIEVE 60% COVER OF SHRUBS AND SAPLING TREES BY YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS COVER STANDARD.
- c. ACHIEVE 80% COVER OF SHRUBS AND SAPLING TREES BY YEAR 5. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THIS COVER STANDARD.

3. PERENNIAL AND GROUNDCOVER COVER:

- a. ACHIEVE 30% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 2. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- b. ACHIEVE 40% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- c. ACHIEVE 60% COVER OF NATIVE PERENNIALS AND GROUNDCOVER BY YEAR 5. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARDS THIS COVER STANDARD.
- 4. SPECIES DIVERSITY: ESTABLISH AT LEAST SEVEN TREE SPECIES BY YEAR 3. ESTABLISH AT LEAST FOUR NATIVE SHRUB SPECIES BY YEAR 3. NATIVE VOLUNTEER SPECIES MAY COUNT TOWARD THESE

STANDARDS.

INVASIVE SPECIES COVER: AERIAL COVER FOR ALL NON-NATIVE, INVASIVE AND NOXIOUS WEEDS WILL NOT EXCEED 10% AT ANY YEAR. INVASIVE SPECIES INCLUDE, BUT ARE NOT LIMITED TO, HIMALAYAN BLACKBERRY, ENGLISH IVY AND IVY SPECIES, CUT LEAF BLACKBERRY, KNOTWEEDS, REED CANARYGRASS, CHERRY LAUREL, AND ENGLISH HOLLY..

1.4 MAINTENANCE

THE SITE WILL BE MAINTAINED IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS AND AS-NEEDED BY THE CITY OF BELLEVUE PARKS & COMMUNITY SERVICES NATURAL RESOURCE DIVISION..

1) FOLLOW THE RECOMMENDATIONS NOTED DURING ANY MAINTENANCE FIELD OBSERVATIONS.

2) GENERAL WEEDING FOR ALL PLANTING AREAS:

- a. AT LEAST TWICE YEARLY, REMOVE BY HAND ALL COMPETING WEEDS AND WEED ROOTS FROM BENEATH EACH INSTALLED PLANT AND ANY UNDESIRABLE VEGETATION TO A DISTANCE OF 18 INCHES FROM THE MAIN PLANT STEM. WEEDING SHOULD OCCUR AS NEEDED THROUGHOUT SPRING AND SUMMER. FREQUENT WEEDING WILL RESULT IN LOWER MORTALITY, LOWER PLANT REPLACEMENT COSTS, AND INCREASED LIKELIHOOD OF MEETING PERFORMANCE STANDARDS BY
- b. DO NOT WEED THE AREA NEAR THE PLANT BASES WITH STRING TRIMMER (WEED WHACKER). NATIVE PLANTS ARE EASILY DAMAGED OR KILLED, AND WEEDS EASILY RECOVER AFTER TRIMMING.
- c. SELECTIVE APPLICATIONS OF HERBICIDE MAY BE NEEDED TO CONTROL INVASIVE SPECIES, ESPECIALLY WHEN INTERMIXED WITH NATIVE SPECIES. HERBICIDE APPLICATION, WHEN NECESSARY, SHALL BE CONDUCTED PER CITY OF BELLEVUE STANDARDS. SEE SPECIFICATIONS.
- 3) REPLACE MULCH AS NECESSARY TO MAINTAIN A 4-INCH THICK LAYER, RETAIN SOIL MOISTURE, AND LIMIT WEEDS.
- 4) SUPPLEMENTAL IRRIGATION BY WATERING TRUCK OR TEMPORARY IRRIGATION SYSTEM SHOULD BE PROVIDED FROM JUNE 1 THROUGH SEPTEMBER 30 FOR THE FIRST TWO YEARS FOLLOWING INSTALLATION IRRIGATION BEYOND THE SECOND YEAR MAY BE NEEDED BASED ON SITE PERFORMANCE OR SIGNIFICANT REPLANTING
- 5) APPLY SLOW RELEASE GRANULAR FERTILIZER TO EACH INSTALLED PLANT ANNUALLY IN THE SPRING (BY JUNE 1) OF YEARS 2 THROUGH 5.

1.5 CONSTRUCTION NOTES

NOTE: THE WATERSHED COMPANY [(425)822-5242] PERSONNEL, OR OTHER PERSONS QUALIFIED TO EVALUATE ENVIRONMENTAL RESTORATION PROJECTS WILL MONITOR:

1) ALL SITE PREPARATION

- a. INVASIVE SPECIES REMOVAL
- b. SOIL PREPARATION.
- c. MULCH PLACEMENT.

2) PLANT MATERIAL INSPECTION

- a. PLANT MATERIAL DELIVERY INSPECTION.
- b. 100% PLANT INSTALLATION INSPECTION.

GENERAL WORK SEQUENCE

- 1) CLEAR PLANTING AREA OF ALL INVASIVE VEGETATION, INCLUDING BUT NOT LIMITED TO HIMALAYAN BLACKBERRY, REED CANARY GRASS, AND ENGLISH IVY.
- 2) MANUALLY OR MECHANICALLY REMOVE ALL INVASIVE VEGETATION PER THE SPECIFICATIONS.

3) INSTALL MULCH.

- 4) ALL PLANT INSTALLATION IS TO TAKE PLACE DURING THE DORMANT SEASON (OCTOBER 15TH-MARCH 1ST) FOR BEST SURVIVAL.
- 5) PREPARE A PLANTING PIT FOR EACH PLANT AND INSTALL PER THE PLANTING DETAILS.
- 6) INSTALL A TEMPORARY, ABOVE GROUND IRRIGATION SYSTEM TO PROVIDE FULL COVERAGE TO ALL PLANTS WITHIN THE RESTORATION

CONTINGENCIES

IF THERE IS A SIGNIFICANT PROBLEM WITH THE ENHANCEMENT AREAS MEETING PERFORMANCE STANDARDS, A CONTINGENCY PLAN WILL BE DEVELOPED AND IMPLEMENTED. CONTINGENCY PLANS CAN INCLUDE, BUT ARE NOT LIMITED TO: SOIL AMENDMENT, ADDITIONAL PLANT INSTALLATION, AND PLANT SUBSTITUTIONS OF TYPE, SIZE, QUANTITY, AND LOCATION.

750 Sixth Street South

Kirkland WA 98033

p 425.822.5242

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www.watershedco.com

Science & Design

STR SHEET SIZE: ORIGINAL PLAN IS 22" x 34". SCALE ACCORDINGLY. PROJECT MANAGER: LV DESIGNED:

> DRAFTED: CHECKED:

JOB NUMBER:

SHEET NUMBER:

LV |

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